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## PATENT ABSTRACTS OF JAPAN

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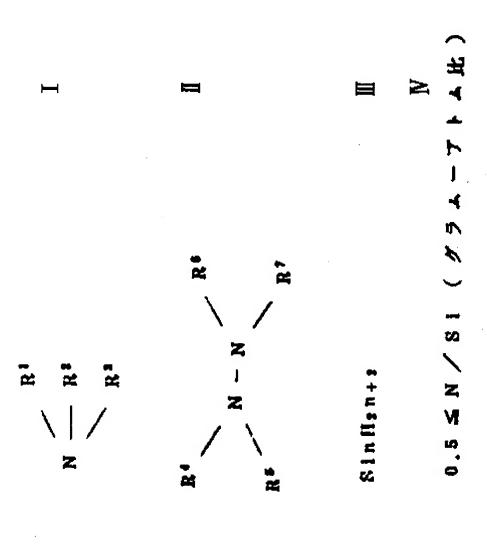
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FILM WITH WIDE BAND **AMORPHOUS SILICON** (54) FORMATION OF GAP

(57) Abstract:

method by adding a specified amount satisfactory control efficiency in the amorphous silicon (a-Si) film with chemical vapor deposition (CVD) of ammonia (deriv.) to a gaseous manufacture of an a-Si film by a PURPOSE: To form the titled starting material. 5/10/01

represented by formula III (where n is substrate is placed in a decomposition CONSTITUTION: Ammonia (deriv.) formula II is used. In the formulae each or R1WR7 is H, alkyl or aryl. A introduced into the furnace optionally where N is the amount of nitrogen in decomposed at about 250W600°C to and/or hydrazine (deriv.) is added to deposit an a-Si film on the substrate. nitrogen, and the silane is thermally At this time, said ammonia (deriv.) relation represented by formula IV the silane by an amount satisfying together with an inert gas such as 2) such as disilane or trisilane is nydrazine (deriv.) represented by amount of silicon in the gaseous silane] to form an a-Si film with represented by formula I and/or nydrazine (deriv.), and Si is the furnace, silane of higher order he ammonia (deriv.) and/or about 1.6W2.5eV band gap. COPYRIGHT: (C)1984,JPO&Japio



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